

Tekkeon

myPower™ ALL *plus*

EXTERNAL LAPTOP BATTERY

MP3450 R2 User Guide



USER GUIDE

myPower™ ALL *plus*
EXTERNAL LAPTOP BATTERY

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Overview

You can use myPower™ ALL—the universal rechargeable battery—to power just about any portable device. Simply connect myPower ALL Plus to your laptop computer, portable DVD player, digital camera, digital camcorder, portable CD player, PDA, mobile phone, or other portable device to extend the battery life. As an added bonus, myPower ALL Plus will charge the internal battery on some devices, while also powering the device.

myPower ALL Plus MP3450 R2 can be used alone, with the optional extended battery (MP3450-10) to double the capacity, or with other myPower ALL Plus batteries to significantly extend the capacity. The extended battery with mounting brackets is sold separately.

Getting Started

Unpacking myPower ALL Plus

Your myPower ALL Plus package includes the following:

User guide (not shown)



myPower ALL Plus
lithium polymer
rechargeable battery



Retractable
USB cable

Mini USB tip



Power adapter



Power output cable



Soft cover

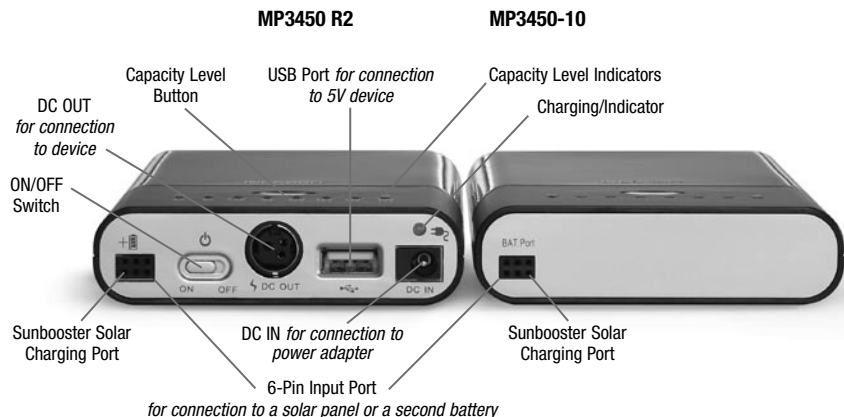


Device At-A-Glance
Card



Adapter plug kit with drawstring bag
(8 adapter tips)

Getting to Know myPower ALL Plus



Storing myPower ALL Plus

Lithium polymer batteries must be used consistently for maximum performance. Therefore, if you do not use the battery often, once a month you should discharge and recharge the battery to 40% (if it will be transported) or 70% (for long term storage), and store it in a cool and dry environment at a temperature between 50° and 86° F (10° and 30°C). You may permanently damage your battery's capacity by storing the battery without any capacity in the cell. It is important that you do not leave the battery in the interior of a vehicle parked in the sun, or exposed to direct sunlight for extended periods of time.

Prolonging Battery Life

Extreme heat and cold will affect your battery's performance. At temperatures above 80°F (27°C), the battery will discharge more quickly, and in colder temperatures, the battery won't charge well. Therefore, it is recommended that the battery is used at room temperature, or between 68°F to 77°F (20°C to 25°C). The battery must be used at temperatures between 32°F to 104°F (0°C to 40°C).

It is not recommended that the battery is charged in temperatures above 104°F (40°C), and the battery capacity may be permanently damaged if you use your battery in temperatures higher than 140°F (60°C). You may damage the battery even more if you charge the device in these temperatures. You may find that using the battery in a very cold environment decreases the battery capacity. Unlike the effects of a hot environment, this is a temporary condition. Once warmed, the battery will return to its previous capacity.

Charging myPower ALL Plus

myPower ALL Plus will charge in four hours when completely empty. The green Charge indicator will turn on after the battery is 80% charged. Therefore, you should view the actual battery capacity before disconnecting the power adapter to stop charging. (Before using myPower ALL Plus for the first time, you must charge the device for four hours.)

1. Plug the power adapter into the **DC IN** jack on the end of myPower ALL Plus.
2. Plug the power adapter into a wall outlet. *The red Charge indicator will turn on to indicate the battery is charging and is less than 80% charged.*
3. When the green Charge indicator turns on, and with the Power switch set to OFF, or with the Power switch set to ON and the device connected, press the voltage selector to view the battery capacity. If the capacity does not indicate full (all blue LEDs on), continue to charge the battery until the battery capacity indicates full. (For additional information, see "View myPower ALL Plus Battery Capacity.")

NOTE: *myPower ALL Plus will automatically shut down the power input when fully charged, so you can charge it overnight.*

Charging with a Third Party Power Supply

You can use a third party power supply to charge myPower ALL Plus as long as it has DC output voltage range from 12V to 20V, with a minimum 1.5A output current. myPower ALL Plus will not charge its internal battery if the input current is lower than 1.5A. To fit the DC jack, the DC plug must have an outside diameter of 5.5mm and an inside diameter of 2.1mm (5.5 x 2.1mm).

If you would like to use one power supply for both your laptop and myPower ALL Plus, use the power supply with the highest output current (Amps). For example, if the output of your laptop's power supply is 19V 4.0A, while the output of the myPower ALL Plus power supply is 20V 3.0A, use your laptop charger to charge both myPower ALL Plus and your laptop.

If your laptop power supply plug does not fit into the myPower ALL Plus DC IN port, you can use an optional input adapter tip, available at the Tekkeon online store.

Charging with a Solar Panel

myPower ALL Plus can be charged using a compatible solar panel. You can charge the device using the DC IN port (5.5 x 2.1mm), or the 3-Pin Input Port.

The DC IN port is designed for use with a DC power adapter with constant current input. Charging myPower ALL Plus requires a minimum of 1.5A current output from the solar panel. In general, a 25W or higher solar panel should provide sufficient power to charge myPower ALL Plus.

The bottom row of the 6-Pin Input Port is designed to allow charging by smaller solar panels (lower than 25W), and requires an optional Smart 3-Pin Adapter (Sunbooster) available from Tekkeon (*see Accessories*). To use the solar panel with this port, the solar panel must have a minimum open circuit voltage of 12V. However, there is no minimum output current requirement from the solar panel.

1. Connect the solar panel output cable into the DC IN port on myPower ALL Plus.
2. Verify that the red charging indicator turns on to indicate the battery is charging and is less than 80% charged.
3. After approximately four hours, press the Capacity Display button to view the battery capacity. If the capacity does not indicate full (all blue LEDs on), continue to charge the battery until the battery capacity indicates full.
4. When the battery capacity indicates full, unplug the connected charging cable.

To Charge through the 3-Pin Input Port

1. Connect the Smart 3-Pin Adapter Bracket on to the end of myPower ALL Plus (shown).
2. Connect the 3-Pin end of the Smart 3-Pin Adapter into the bottom row of the 6-Pin Input Port on myPower ALL Plus (shown) and the other end into the solar panel output port.



-
3. Verify that the charging indicator next to the input jack on the Smart 3-Pin Adapter (shown) turns on to indicate the battery is charging.
 4. After approximately four hours, press the Capacity Display button to view the battery capacity. If the capacity does not indicate full (all blue LEDs on), continue to charge the battery until the battery capacity indicates full.
 5. When the battery capacity indicates full, unplug the connected charging cable.

Using myPower ALL Plus

myPower ALL Plus can be used to power and/or charge up to two portable devices simultaneously. With devices that require higher voltage levels, like laptop computers and portable DVD players, we recommend that you use myPower ALL Plus only to power the device. You will find that powering without charging your higher voltage device will maximize the battery life of myPower ALL Plus, thus letting you use your portable device even longer.

To use myPower ALL Plus to power and/or charge your device, take these steps which are described in detail in the following sections.

- Select an adapter plug for your main device and connect the plug to the output cord.
- Connect the power output cord to myPower ALL Plus.
- Slide the Power switch to on.
- Adjust the voltage level to match that of your main device.
- Connect the adapter plug/output cord to your main device.
- Connect a second 5V device

Select/Connect the Adapter Plug

1. Select the adapter plug that fits securely into the power jack on your portable device.
2. Locate the polarity symbol on your device in the area around the power connector jack:



Center Positive



Center Negative



WARNING: *myPower ALL Plus supports Center Positive polarity only. If your device has a Center Negative polarity, do not power the device with myPower ALL Plus; contact support@tektron.com for assistance.*

3. Connect the adapter plug to the power output cord (but not the device).

If you are using a UA-xxx adapter (rather than PA-xxx), you must insert the PA-L34 ("Z") adapter that came with your myPower ALL Plus between the adapter cord and UA-xxx adapter as shown.

NOTE: *If you change the adapter plug while the power adapter cord is connected to myPower ALL Plus, the voltage setting will reset to the lowest voltage, which is the default voltage setting.*



Connect the Power Output Cord

1. Plug the large end of the power output cord into the **DC OUT** jack on the end of myPower ALL Plus.
(If you have previously selected a voltage, the voltage selection will be returned to the lowest setting.)

Adjust the Voltage Level

1. Locate the voltage specification for your portable device. This can be found on the device power adapter label or device specification label which typically is found on the bottom of the unit. (If available, use the voltage specification shown on the power adapter.)
2. Slide the power switch to ON. *The 5V voltage indicator will turn on to indicate that the voltage is set to the lowest setting.*
3. Connect the output cable to the DC OUT port.
4. Press the voltage selector until the voltage indicator for your voltage selection (5, 6, 7.5, 9, 12, 14, 16, 19) turns on. Set the voltage output to the selection that is equal to, or one step lower or higher (whichever is closer) than the voltage identified for your device. For example, if your device requires 6V, set the voltage to **6V**. If you device requires 7.2V, set the voltage to **7.5V**. *The voltage will be automatically locked when the device is connected and the light behind the voltage selector will glow to indicate the voltage is locked.*
5. To change the voltage, disconnect the output cable from the device, and select a new voltage. *The voltage will be automatically locked after a device is connected.*

CAUTION: It is important to set the voltage selector **NO MORE** than one step higher than the voltage requirement for the portable device as an incorrect setting may prevent myPower ALL Plus from working with your device, or may harm your device in the rare instance that the device accepts the higher voltage. However, for all devices, adjusting the voltage **ONLY** one step higher than required will not harm the device.



Sample Power
Adapter Label

TIP: You can optimize the use of myPower ALL Plus with your laptop computer or portable DVD player by setting the voltage on myPower ALL Plus to less than the required voltage shown on the laptop computer power supply. This prevents myPower ALL Plus from charging the device, thus extending the amount of time you can use myPower ALL Plus to power your laptop computer.

Most laptop computers have a battery voltage of 11.1V or 14.8V, allowing them to be powered with 12V or 14V. Therefore, it is recommended that you set the voltage to 12V first, and then test to see if it will power your laptop. If not, increase the voltage to 14V, and retest. Repeat this process until you reach the voltage that will power your laptop.

Most portable DVD players require 9 or 12 volts. Set the voltage to 7.5V and test to see if myPower ALL Plus will power your device at this setting. If not, increase the voltage by one level and retest.

myPower ALL Plus VOLTAGE SELECTION

This table provides recommended voltage settings by device type.

Device Type	Voltage on Device Power Adapter	Suggested Voltage on myPower ALL Plus
Laptop Computers	14V	12V
	16V	14V
	19V	14 - 16V
	24V	19V
Portable DVD Players	9V	7.5 - 9V
	12V	9 - 12V
Digital Cameras	5 - 6V	5 - 6V
CD Players	4.5 - 5V	5V
PDA's	5V	5V
Mobile Phones	3.7 - 6V	5 - 6V
Digital Camcorders	9V	7.5 - 9V
	12V	9 - 12V
MP3/MP4	5V	5V

Connect the Portable Device

1. Connect the adapter plug into the power jack on the portable device. *The voltage selection will be locked automatically and cannot be changed until the power output cord is disconnected from the device.*
2. Turn on the portable device and use it as you would normally. *While connected, myPower ALL Plus will power and charge your device. (As mentioned earlier, myPower ALL Plus will not charge a device if the voltage setting is lower than that required.)*

or

Leave the portable device turned off and myPower ALL Plus will charge the device battery.

3. When finished, slide the Power switch to OFF to turn off the power when myPowerALL Plus is not in use.

NOTE: *If your portable device displays a low voltage/low capacity or double-beep warning while myPower ALL Plus is connected, adjust the voltage setting to one level higher.*

TIP: *For most portable devices, myPower ALL Plus can be used to power the device even when the device battery is not installed.*

Connect the 5V Device

1. Connect the USB adapter tip (or other optional adapter tip UA-xxx) into the retractable USB cable.
2. Connect the retractable USB cable into the USB port on myPower ALL Plus.
3. Connect the adapter tip into your 5V device.
4. Slide the Power switch to ON to turn on the power. *While connected, myPower ALL Plus will power and charge your device.*
5. Slide the Power switch to OFF to turn off the power when myPower ALL Plus is not in use.

NOTE: *The USB port provides only 5V of power, so the voltage cannot be changed. When using this port, you will not select the voltage.*

View myPower ALL Plus Battery Capacity

The capacity in myPower ALL Plus will decrease as the battery powers and/or charges your devices.

The remaining capacity is shown on the voltage indicator, which is accessed as described below. As the remaining capacity decreases, the lights will turn off in sequence from right to left. When the myPower ALL Plus battery capacity is low, only the first capacity indicator will be on. You should recharge myPower ALL Plus at this time. When myPower ALL Plus is completely out of battery, all lights will be off. At this point, you must charge myPower ALL Plus.

1. With the output cable disconnected from myPower ALL Plus and the power switch in either position, press and hold the voltage selector/capacity button to check the capacity.

or

With the output cable connected to myPower ALL Plus and the power switched to OFF, press and hold the voltage selector.

or

With the device connected and the power button switched to ON, press and hold the voltage selector.

2. To view the voltage selection, release the voltage select and the battery capacity indicators will turn off. *One indicator will remain on to indicate the voltage selection.*

CAPACITY INDICATOR

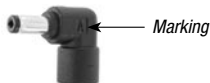
1st Blue Indicator	1-5% (<i>Recharge before using</i>)
2nd Blue Indicator	5-15%
3rd Blue Indicator	15-25%
4th Blue Indicator	25-40%
5th Blue Indicator	40-55%
6th Blue Indicator	55-70%
7th Blue Indicator	70-85%
8th Blue Indicator	85-100%

Adapters

Eight adapter plugs that fit most DC adapter jacks on a variety of laptops and other devices, and a mini USB tip are included with myPower ALL Plus. The following table shows each adapter tip model number, marking, and compatible devices and manufacturers.

Adapter Tip	Marking	Devices/Manufacturers
PA-L47	A	Laptops: Acer, Asus eeePC, HP/Compaq
PA-L5D	B	Laptops: Acer, IBM/Lenovo
PA-L5F	C	Laptops: Acer, Asus, Fujitsu, Gateway, HP/Compaq, IBM/Lenovo, NEC, Panasonic, Toshiba, Winbook
PA-L63	D	Laptops: Toshiba
PA-L65	E	Laptops: Fujitsu, Panasonic, Sony
PA-L40	V	Panasonic Digital Camcorders, Sony PSP, Portable DVD players
PA-L34	Z	Canon Digital Camcorders
UA-U03	N/A	Cell Phones, MP3 and Portable Media Players

A sample marking for the adapters as shown here:



Using Multiple Batteries

You can increase the capacity of myPower ALL Plus by adding one or more extra battery units. There are two options for adding multiple batteries:

- Add an Extended Battery, MP3450-10, which is attached to the first battery with a bracket, and can be used only as a second battery.
- Add one or more additional myPower ALL Plus batteries using an optional 6-Pin Cable (one cable per additional battery).

Adding the Extended Battery

1. Place MP3450 R2 on top of MP3450-10 with both flat silver ends facing the same direction.
2. Connect the bracket with the 3-Pin plugs inside to the silver ends of the devices. The 3-Pin plugs will mate with the battery port on each of the devices, and the controls on the end of MP3450 R2 will show through the bracket opening.
3. Connect the second bracket on the opposite end of the devices to hold the units together securely.
4. Use MP3450 R2 as you would normally.



Adding Another Battery

1. Connect the optional 6-Pin Cable to the 6-Pin Input Port on both batteries.

or

Use the Optional myPower ALL Plus Bracket to connect the batteries as described in the previous section.

All batteries will be charged/discharged at the same time (in parallel).

Accessories

In addition to the adapters, several accessories are available for myPower ALL Plus, including:

- MP3300-11** 3' coil output cable.
- MP3300-12** 2' straight output cable with right angle output connector.
- MP3450-10** Extended battery that doubles the capacity of myPower ALL Plus (see previous section).
- MP3450-11** myPower ALL Plus bracket for connection of two batteries.
- MP3450-20** myPower ALL Plus leather case.
- MP3450-30** Car charger to charge myPower ALL Plus.
- PA-6PC** 6-pin cable for connection of multiple myPower ALL Plus batteries.
- PA-CLA** Female car charge that connects to myPower ALL Plus to charge your mobile device with your mobile device car charger.
- PA-SCC1** Smart 3-pin adapter to charge myPower ALL Plus with a solar panel.
- PA-xxxxF** Input adapter tip that enables the use of the laptop power adapter to charge myPower ALL Plus. To identify the input adapter tip compatible with your laptop, go to the Tekkeon online store and search for "input adapter," or e-mail support@tekkeon.com for assistance.

These accessories can be ordered from our web site at www.tekkeon.com or by phone at 888-787-5888 or 714-832-1266.

Troubleshooting

If myPower ALL Plus does not power the portable device or charge the device battery, take these steps:

1. Verify that the current consumption of the portable device is not more than 4.0 Amp. If the device consumes more than the maximum provided by myPower ALL Plus, the device will shut down when turned on and cannot be powered and/or charged by myPower ALL Plus.
2. Verify that the device does not require more than 19V. If the device requires more, MP3450 R2 will not be able to charge the device. However, in most but not all cases, MP3450 R2 will be able to power the device.
3. View the remaining battery capacity. If it is below 25%, recharge myPower ALL Plus.
4. Check that the output cord is connected to both myPower ALL Plus and the portable device, and that the adapter plug fits snugly into the power jack on your portable device. If not, try another adapter.
5. Verify that the polarity of the device power jack is Center Positive. If the polarity is Center Negative, please contact support@tekkeon.com for assistance.



Center Positive Symbol



Center Negative Symbol

6. Check that the output voltage for your portable device matches or is just below the output voltage set on myPower ALL Plus. If the output voltage is not correct, unplug the output cable from the portable device, and change the voltage as required.
7. Verify that a battery is installed in the portable device as some devices will not function without a battery installed.
8. Verify if your device is designed with charging circuitry that limits the input voltage. If so, myPower ALL Plus may not be able to power or charge the device. (For example, if a device is designed to accept only a 10.2V input, then myPower ALL Plus may not be able to power or charge the device.)

Limited Warranty

The product enclosed herein is warranted to be free of operational defects for a period of one year from the date of purchase. In the event of a defect in operation during the warranty period Tekkeon, Inc. will replace the defective product when the owner returns all product contents. The limited warranty will be considered void if the unit is tampered with, subject to misuse, negligence or accidental damage, has been improperly serviced, or if the security seal is removed. This warranty is limited to replacement only and shall not cover any other damages. Any product returned to Tekkeon, Inc. with no fault found will be returned to the owner at the owner's expense.

To obtain warranty coverage, please complete and submit the enclosed registration card.

Disclaimer of Warranties

Any user of this product does so at the user's own risk. To the maximum extent permitted by applicable law, Tekkeon, Inc. and its suppliers provide the hardware and any support services related thereto "as is" and with all faults; and hereby disclaim all warranties and conditions, whether express, implied or statutory, including, but not limited to implied warranties of merchantability, fitness for a particular purpose, non-infringement, lack of negligence or correspondence to description, except for those warranties specifically and expressly provided in the Limited Warranty.

With respect to the use of this product, in no event shall the company be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential and other damages.

Warning

- Do not burn or short circuit.
- Must be recycled or disposed of properly.
- Never attempt to disassemble or reassemble.
- Battery output maximum current is 4.0 Amps.



Customer Support

Customer support for myPower ALL Plus is available at:

Tekkeon, Inc.

c/o myPower ALL Plus

3002 Dow Avenue, #134

Tustin, CA 92780

888-787-5888 / 714-832-1266

www.tekkeon.com

Tekkeon, Inc. must issue a Return Merchandise Authorization (RMA) number for all exchanges or refunds.



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Rev A

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Specifications are subject
to change without notice.

Cut loose. Stay loose.